

# Faculty Research & Creative Work Symposium

February 11, 2014



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# Table of Contents

## Welcome Message

*Welcome to the 4<sup>th</sup> annual Faculty Research and Creative Work Symposium. The purpose of this symposium is to foster new connections and celebrate the outstanding productivity of our faculty. This booklet represents a compilation of the faculty publications, other scholarly activities, and highlights of the supporting research, compliance, and commercialization offices for the July 2012- June 2013 period. Last year sixty-four posters were presented as part of the symposium, which then included Service Learning & Community Engagement. Since then the popularity and success of this event has resulted in the spin-off of a new, separate symposium which was held in the fall for teaching, learning and community service (hosted by VP Charlotte Mandell and Dean Anita Greenwood). The format of the research symposium represents recognition of the fine scholarship and creative work of the UMass Lowell faculty community. In addition to the poster presentations that number over 50 this year, we are giving faculty the opportunity to give a brief description of their work; promoting another opportunity to find means to collaborate. We hope you enjoy this year's event. Thank you for attending.*

Faculty Books .....	1
Peer Reviewed Publications	
College of Health Sciences .....	5
College of Sciences .....	14
Fine Arts, Humanities and Social Sciences .....	31
Francis College of Engineering .....	43
Graduate School of Education .....	57
Manning School of Business .....	58
Promotion and Tenture, 2013 .....	62
New Faculty Hires for Academic Year 2013 .....	63
UMass Lowell Seed Funding .....	64
Vice Provost for Research Office (VPRO) Annual Reports .....	65

## **FACULTY BOOKS (FY 2012-2013)**

### **COLLEGE OF ENGINEERING**

#### **ELECTRICAL ENGINEERING**

##### **OLIVER IBE**

**Ibe, O.C** (2013) *Markov Processes for Stochastic Modeling*, 2<sup>nd</sup> Edition, Elsevier.

**Ibe, O.C.** (2013) *Elements of Random Walk and Diffusion Processes*, John Wiley

#### **MECHANICAL ENGINEERING**

##### **JAMES SHERWOOD**

Drane, P., **Sherwood, J.** Editors (2012) *Conference Proceedings of The Engineering of Sport 9*, Procedia Engineering, Volume 34, 2012, pp 1-889, Elsevier, Boston, ISSN 1877-7058

#### **PLASTICS ENGINEERING**

##### **RAMASWAMY NAGARAJAN**

**Nagarajan, R.** (Co-Editor) (2013) *Journal of Renewable Materials*, Scrivener Publishing

### **COLLEGE OF HEALTH SCIENCES**

#### **CLINICAL AND NUTRITIONAL SCIENCES**

##### **KATHERINE TUCKER**

Ross C, Caballero B, Cousins R, **Tucker KL**, Zeigler T (Eds). (2012). *Modern Nutrition in Health and Disease*, 11th Edition. Baltimore, MD: Lippincott Williams & Wilkins.

#### **NURSING**

##### **HEIDI FANTASIA**

Secor, M., **Fantasia, H.C.** (2012) *Fast Facts about the Gynecologic Exam for Nurse Practitioners: Conducting the GYN Exam in a Nutshell*, Springer, NY, NY.

## COLLEGE OF SCIENCE

### BIOLOGICAL SCIENCE

#### SHEA, THOMAS

Shea, T. (2013) *Life on this Rock: An introduction to biology for students majoring in other fields*, McGraw Hill.

## FINE ARTS HUMANITIES AND SOCIAL SCIENCE

### ART

#### JAMES VEATCH

Kunzendorf, Robert G., & **Veatch, James W.** (2013). *Envisioning the Dream through Art and Science*. Amityville, NY: Baywood. 276 pages. ISBN: 978-0-89503-857-9.

### CRIMINAL JUSTICE AND CRIMINOLOGY

#### JAMES FOREST

**Forest, James J.F.** (ed.) *Intersections of Crime and Terror*. London: Routledge. 190 pages. ISBN: 9780415639613.

**Forest, James J.F.**, Russell Howard and Joanne Moore (eds.) *Homeland Security and Terrorism: Readings and Interpretations (2<sup>nd</sup> Edition)*. New York: McGraw-Hill. 586 pages. ISBN: 9780078026294.

**Forest, James J.F.** *The Terrorism Lectures: A Comprehensive Collection for Students of Terrorism, Counterterrorism and National Security*. Santa Ana CA: Nortia Press. 409 pages. ISBN: 9780984225293

#### JOHN HORGAN

**Horgan, John.** (2013). *Divided We Stand: The Strategy and Psychology of Ireland's Dissident Terrorists*. New York: Oxford University Press.

## CULTURAL STUDIES

### CAROLE SALMON

Matz, María R. and **Carole Salmon** (eds.) (2012). *How the Films of Pedro Almodóvar Draw Upon and Influence Spanish Society: Bilingual Essays on his Cinema*. Edwin Mellen Press: Lewiston, NY.

### MARIA MATZ

**Matz, María R.** and Carole Salmon (eds.) (2012). *How the Films of Pedro Almodóvar Draw Upon and Influence Spanish Society: Bilingual Essays on his Cinema*. Edwin Mellen Press: Lewiston, NY.

**Matz, María R.** (2012). *Definiendo a la mujer: Cristina Escofet y su teatro*. Penelope Academic Press. 190 pp.

### SHERYL LYNN POSTMAN

**Postman, SL.** (2012) *An Italian Writer's Journey through American Realities: Giose Rimanelli's English Novels*, (New York: Bordighera Press

## ENGLISH

### BRIDGET MARSHALL

**Marshall, B M.** and Elbert. M Co-Editors. (2013) *Transnational Gothic: Literary and Social Exchanges in the Long Nineteenth Century*. Co-Edited collection and co-authored Introduction. (London: Ashgate).

### KEITH MITCHELL

**Mitchell, K. B.,** Vander, R. (2013), Eds. *Critical Perspectives on Percival Everett*. UP Mississippi.

## HISTORY

### CHRISTOPHER CARLSMITH

**Carlsmith C** and Mencaroni Zoppetti, M (eds) (2013). *Per una storia della cultura e della società a Bergamo. Indagini e percorsi nel Cinquecento e Seicento* [Toward a Social and Cultural History of Bergamo: Investigations into the Sixteenth and Seventeenth Centuries], Bergamo: Sestante Edizioni, 2013. ISBN 978-88-6642-114-6.

## **PATRICK YOUNG**

**Young, P.** (2012) *Enacting Brittany: Tourism and Culture in Provincial France*, (London: Ashgate,).

## **PHILOSOPHY**

## **WHITLEY KAUFMAN**

**KAUFMAN, WHITLEY.** (2012) *Honor and Revenge: A Theory of Punishment*.

## **POLITICAL SCIENCE**

## **JOHN WOODING**

**Wooding, John** and Esterberg, Kristen. (2013) *Divided Conversations: Identities, Leadership, and Change in Public Higher Education*, Vanderbilt University Press.

## **MORGAN MARIETTA**

**Marietta, Morgan.** (2013). *A Citizen's Guide to the Constitution and the Supreme Court: Constitutional Conflict in American Politics*. Routledge Press,

## **PSYCHOLOGY**

## **ALYSSA MCCABE**

**McCabe, A., & Chang, C.** (2013). *Chinese language narration: Culture, cognition, and emotion*. The Netherlands: John Benjamins Publishing Company.

## **ROBERT KUZENDORF**

**Kunzendorf, Robert G., & Veatch, James W.** (2013). *Envisioning the Dream through Art and Science*. Amityville, NY: Baywood. 276 pages. ISBN: 978-0-89503-857-9.

## COLLEGE OF HEALTH SCIENCES

### CLINICAL LABORATORY AND NUTRITIONAL SCIENCES

#### GARELNABI, MAHDI

**Garelnabi, M.**, Lor, K., Jin, J., Chai, F., Santanam, N. (2013). The paradox of ApoA5 modulation of triglycerides: Evidence from clinical and basic research. *Clinical Biochemistry*, 46(1-2), pp 12-19.

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#### GOODYEAR, NANCY

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#### **WILSON, THOMAS**

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### **COMMUNITY HEALTH AND SUSTAINABILITY**

#### **ACKERSON, LELAND**

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**Ackerson, L.K.**, Ramanadhan, S., Arya, M., Viswanath, K. (2012). Social disparities, communication inequalities, and HIV/AIDS-related knowledge and attitudes in India. *AIDS and Behavior*, 16(7), pp 2072-2081.

#### **FOCO, REBECCA**

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#### **LEE, A. JAMES**

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#### **SLATIN, CRAIG**

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#### **TICKNER, JOEL**

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## **NURSING**

### **ABDALLAH, LISA**

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### **BREWIN, DOROTHY**

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### **MAWN, BARBARA**

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## **FINE ARTS, HUMANITIES AND SOCIAL SCIENCES**

### **ART**

#### **COATES, JAMES**

EXPOSED 2013 – Site-Specific Installation – Juried. Helen Day Art Center. Stowe, Vermont June - October, 2013

PATTERN INCLUDED – Site Specific Installation – Invitational. Loeber Gallery – Shenkar College of Design and Engineering, Tel Aviv, Israel May, 2013

CELEBRATING SCULPTURE – Site-Specific Installation – Invitational. McIninch Art Gallery - Southern New Hampshire University, Manchester, New Hampshire 2012 - 2013

#### **GAVARINI, JEHANNE-MARIE**

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## **MINKKINEN, ARNO RAFAEL**

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**Minkkinen, A. R.**, *An Enduring Vision: Photographs from the Lane Collection*, Museum of Fine Arts Boston, p.64.

**Minkkinen, A.R.**, Authenticity is Everything, The Living Portraits of Martha Casanave. Introduction to *Trajectories: A Half Century of Portraits, photographs by Martha Casanave*, Image Continuum Press, California, 2013.

**Minkkinen, A.R.**, Fotografisk Finn by Christian Kjelstrup. *Aftenposten*. Oslo, Norway, 2012, pp. 90-100.

**Minkkinen, A.R.**, Photography = Fiction? *Photomeetings Luxembourg*, Luxembourg, 2012 pp. 22-27.

**Minkkinen, A.R.**, Questionnement Éternel by Quentin Gillard. *Talk Magazine*, Bruxelles, Belgium, 2012, pp. 36-41.

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**Minkkinen, A.R.**, Stevenson, James, On My Mind: *Jamestown, Rhode Island, 1974. Foam*, International Photography Magazine, Amsterdam, The Netherlands, p. 28.

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**Minkkinen, Arno Rafael**, (2013) Bogota, Colombia: *Views on Landscapes. Photography from Norway, Sweden, Denmark, Iceland and Finland*: Museum of Modern Art Bogota, curated by Jan-Erik Lundström.

**Minkkinen, Arno Rafael**, 2012 New York: *Performing for the Camera, Four Decades of Self-portraits*. Barry Friedman Ltd., 515 West 26<sup>th</sup> Street.

**Minkkinen, Arno Rafael**, Luxembourg: *Photography=Fiction?* Galerie Clairfontaine, Luxembourg. 2012

**Minkkinen, Arno Rafael**, Athens, Greece: *Palindromes*. Phototheatron: Athens House of Photography, 2012

**Minkkinen, Arno Rafael**, (2013) Päivi Rajakari, *Pohjan tähdet: International Finnish Photography and Film*. Finnish Museum of Photography: Helsinki.

**Minkkinen, Arno Rafael**, (2013) *Mai-Photographies dans l'intimité de l'image*. ArMen: Bretagne, France.

## **WETMORE, ELLEN**

**Wetmore, E**, *Under New Management*: Video Store at ODD Gallery, a curated project by Suzanne Carte & Su-Ying Lee, Klondike Institute of Art and Culture, Dawson City, Yukon; Access Gallery, Vancouver; Saint John Galerie Tiers-espace, New Brunswick, Canada; work funded in part by 2011 UML Seed Grant

**Wetmore, E**, *Public Screen 2013*, curated by Yara Mekawei in Cairo, Egypt *Videoholica International Video Art Festival 2013*, Varna, Bulgaria, curated by Pavlina Mladenova and Neno Belchev. *work included was Honey*, 2011, single channel video HD, 3:38 m:s, 16:9 format, audio, color, <https://vimeo.com/35016907>, "Honey interrogates the lens and fourth wall through mark making with the tongue."

**Wetmore, E**, The First Biennial Festival of Sound Art and Performance Art, curated by Geoffrey Koestch for Contemporary Arts International at the Quarry in Acton, MA

**Wetmore, E**, *Synthetic Zero*, "Looking In/Looking Out", curated by Emily Roberts-Negron and Mitsu Hadeishi, at BronxArtSpace, NYC, NY

**Wetmore, E**, Video online at <http://videostillgallery.com>, curated by Karen Chan-Baggetta.

**Wetmore, E**, *Interface*, with John Keston, Peter Nelson, Dana Sperry and Ellen Wetmore, Walker's Point Center for the Arts, Milwaukee, WI

**Wetmore, E**, *The Other F Word*, Bunker Hill Community College Art Gallery, curated by Laura Montgomery, Boston, MA

**Wetmore, E**, *Juried 2013 Show*, Kinsey Institute for Human Sexuality at the Grunwald Gallery of Art, Indiana University, Bloomington, IN

**Wetmore, E**, *78th Regional Exhibition of Art & Craft*, at Fitchburg Art Museum, curated by Nina Gara Bozicnik

**Wetmore, E**, *Capture: An International Video Art Exhibit*, The Crisp-Ellert Art Museum, Flagler University, St Augustine, FL

**Wetmore, E**, *Faces*, Groton Public Library, Deborah Santoro, Curator, Owen Smith Shuman Gallery, Groton, MA

**Wetmore, E**, *Art Wednesdays: Ellen Wetmore, Sky Over Clouds*, July 17 & 24 at Dassara, Brooklyn, NY, at the invitation of Ralph Jacobus.

**Wetmore, E**, *2013 The Red Series*, Conlon Media Wall at Fitchburg State University, Fitchburg, MA, invitation by Robert Harris, Professor of Communications Media, work shown was produced with partial funding from 2011 UML Seed Grant.

**Wetmore, E**, *Digitize This, Exploring/Exploiting the Rise of Digital Arts and Digital Humanities*, November 2&3, 2012, Worcester Polytechnic Institute: *Art on the Marquee: Creating and Programming Video for Unique Urban Spaces*.

**Wetmore, E**, Smfa Traveling Fellowship, School of the Museum of Fine Arts, Boston, MA Finalist for solo exhibition at the Museum of Fine Arts (3 of final 10).

**Wetmore, E**, *Art On The Marquee*, Boston Convention & Exhibition Center, Boston, MA commission to produce artworks for 80-foot high video marquee *Playing with the Moon* (4 min). "Boston Cyberarts and the Massachusetts Convention Center Authority have teamed up to create "Art on the Marquee,"

**Wetmore, E** "Artbotics, Art and the NSF." Published in the Spring 2013 issue of *Media N, Journal of the New Media Caucus*.

**Wetmore, E**, "Artbotics: An Introduction to Creating Robotic Art", *Annals of the International Symposium of Science Museums in Busan, Korea*, STEAM Education, September 20-22, 2012.

## **CRIMINOLOGY AND JUSTICE STUDIES**

### **BUZAWA, EVE**

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**Buzawa, E.S.** (2012) The Evolving Police Response to Domestic Violence *Journal of Police Crisis Negotiations*, 12 (2), pp. 82-86.

Hirschel, D.J., **Buzawa, E.S.** (2012) The Role and Impact of Primary Aggressor Laws and Policies *Journal of Police Crisis Negotiations*, 12 (2), pp. 165-182.

### **FISHER, WILLIAM**

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### **HIRSCHEL, DAVID**

**Hirschel, D.** (2012) The Benefits of More "Victim-Focused" Coordinated Community Responses to Intimate Partner Violence: A Critique of "The Impact of Victim-Focused Outreach on Criminal Legal System Outcomes Following Police-Reported Intimate Partner Abuse," by Anne P. DePrince, Joanne Belknap, Jennifer S. Labus, Susan E. Buckingham, and Angela R. Gover *Violence Against Women*, 18 (8), pp. 897-905.

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#### **MORABITO, MELISSA**

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#### **REID, JOAN**

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**Reid, Joan A.** (2013). Rapid Assessment Exploring Impediments to Successful Prosecutions of Sex Traffickers of U.S. Minors. *Journal of Police and Criminal Psychology*, 28, 75-89. DOI: 10.1007/s11896-012-9106-6

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#### **SOCIA, KELLY**

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#### **TRACY, PAUL**

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#### **WILLIAMS, LINDA**

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### **CULTURAL STUDIES**

#### **Salmon, Carole**

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## **ECONOMICS**

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### **KINGSLEY, DAVID**

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# UNIVERSITY OF MASSACHUSETTS LOWELL

## Promotion and Tenure, 2013

### **Promotion with Tenure to Associate Professor**

Elizabeth Bifuh-Ambe	Education
Budhlall, Bridgett	Plastics Engineering
Harris, Christopher	Criminal Justice & Criminology
Haynes, Michelle	Psychology
Kaag, John	Philosophy
Lohmeier, Jill	Education
Matz, Maria	Cultural Studies
Salmon, Carole	Cultural Studies
Tate, Stephanie	Accounting
Young, Patrick	History

### **Promotion to Associate Librarian with Tenure**

Fisher, Joseph	Librarian
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### **Promotion with Tenure to Full Professor**

Forest, James	Criminal Justice & Criminology
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### **Promotion to Full Professor**

Akyurtlu, Alkim	Electrical & Computer Engineering
Hu, Tingshu	Electrical & Computer Engineering
Lu, Xuejun	Electrical & Computer Engineering
Manohar, Sanjeev	Chemical Engineering
Podolsky, Victor	Physics
Thawngmung, Ardeth	Political Science

### **Promotion to Clinical Associate Professor**

Scribner-MacLean, Michelle	Curriculum and Instruction
Tremblay, Celeste	Nursing

## New Faculty Hires for Academic Year 2013

Amirkhizi, Alireza	Mechanical Engineering	Assistant Professor
Bloom, Mia	Criminal Justice	Professor
Camp, Jordan	Sociology	Assistant Professor
Cao, Yu	Computer Science	Assistant Professor
Chow, Kwok-Fan	Chemistry	Assistant Professor
Duran-Martinez, Angelica	Political Science	Assistant Professor
Horgan, John	Criminal Justice	Professor
Keough, Lori	Nursing	Assistant Professor
Kim, Taewoo	Accounting	Assistant Professor
Kovacs, Tunde	Finance	Assistant Professor
Laccetti, Margaret	Nursing	Assistant Professor
Lee, Eun-Ju	Finance	Assistant Professor
Ngwa, Wilfreed	Physics	Assistant Professor
Nugent, Matthew	Biology, Chair	Professor
Peters, Anya	Nursing	Assistant Professor
Rosales, Rocio	Psychology	Assistant Professor
Tucker, Katherine	Clinical Laboratory Sciences	Professor
Uzonyi, Gary	Political Science	Assistant Professor
Vinson, Jenna	English	Assistant Professor
Vokkarane, Vinod	Electrical and Computer Engineering	Associate Professor
Wei, Guo	Physics	Assistant Professor
Wu, Yi-Ning (Winnie)	Physical Therapy	Assistant Professor
Zhang, Yuan	Nursing	Assistant Professor

## UMASS LOWELL SEED FUNDING

### 2013 Creative Economy Awards

**Robin Toof** (*Director, Service Learning and Co-Director Center for Women and Work*), **Meg Bond** (*Professor, Psychology*) and **Michele Haynes** (*Associate Professor, Psychology*) - UMass Lowell - "Best Practices in Board Diversity."

**Patricia Fontaine** (*Clinical Associate Professor, Curriculum and Instruction*) - UMass Lowell - "Lowell: A City of Refugees, a Community of Citizens."

### 2013 Science and Technology Award

**Ramaswamy Nagarajan** (*Associate Professor*) - UMass Lowell - *Strengthening Army-UMass Collaboration through HEROES Initiative.*

### 2013 Internal Seed Grant Awards

**Urmitapa Dutta** – Assistant Professor/Psychology – “Exploring Youth Perspective on Community Violence: A Participatory Action Research Project.” *Public Service Award*

**Ying Huang** – Assistant Professor/Management – “The Dynamic Role of Interpersonal Ties in Buyer-Supplier Relationships: Evidences from Guanxi in China.” *Public Service Award*

**Jason Lawrence** – Associate Professor/Psychology – “Why Do Students with Contingent Self-Worth Underperform on High Stakes Tests.” *Public Service Award*

**Yuanchang Xie** – Assistant Professor/Civil Engineering – “Development of a Simulated Environment for Investigating the Efficiency Implication of the Connected Vehicle Technology (CVTech).” *Public Service Award*

**Mahdi Garelnabi** – Assistant Professor/Clinical Laboratory and Nutritional Sciences – “Targeting the Beneficial Effects of Quercetin Intake and Exercise on Adipose Tissue Metabolism and Micro RNA Signaling.” *Advancing Research Scholarship and Creative Work (ARSCW) Award*

**Benyuan Liu** – Associate Professor/Computer Science – “Mobile Health for Allin Peru: A Collaborative Research Initiative between UML and UNI.” *Healey Award and Advancing Research Scholarship and Creative Work (ARSCW) Award*

**Morgan Marietta** – Assistant Professor/Political Science – “Dueling Facts in American Democracy: Partisan Realities and the Fading Value Distinction.” *Advancing Research Scholarship and Creative Work Award*

**Ellen Wetmore** – Assistant Professor/Art – **Wael Kamal** – Lecturer/Communications – “The Pleasure of Vertigo/Time Studies.” *Advancing Research Scholarship and Creative Work Award*

**Hongwei (Harry) Zhu** – Associate Professor/OIS – “Understanding the Development of High-Quality Data Standards.” *Healey Award*

**Yana Weinstein** – Assistant Professor/Psychology – “Dynamics Correlates of Mind-Wandering in the Classroom.” *Healey Award*



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# Vice Provost for Research Office (VPRO)

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## Annual Reports

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- Enlightened Bites
  - Student Research
  - Core Research Facilities (CRF)
  - New Venture Development (NVD)
  - Commercial Ventures & Intellectual Property (CVIP)
  - Institutional Compliance (OIC)
  - Research Administration
-

## Enlightened Bites (EBites) Workshops (Fall 2012-Spring 2013)

### Adrianna (Andy) Morris

Assistant to the Vice Provost for Research  
Program Director, Campus Research Co-ops  
Tel. 978.934.2898

EBites is a knowledge network that covers a wide range of topics recommended by the VPRO team, faculty, and staff to support the research community. This year, we added Echo 360 lecture capture to many of our workshops, so that they may be viewed asynchronously (*of course, we encourage researchers to attend in person for the Q&A!*). The following is a list of the topics presented in AY12-13:

### Proposal Development

- Mandatory for PI's who will be submitting an NIH, NIOSH, CDR or HRSA proposal (Linda Concino)
- UMass Medical School Center for Clinical and Translational Science-The Life Science Moment Fund (Nate Hafer)
- NSF CAREER proposal workshop (Linda Concino, Julie Chen)

### Resources

- TA/RA Evaluations, Job Descriptions, Graduate Program update (Deborah White, Amber Squires)
- Teaching an Intl Course, taking a class overseas (Mary Robbins, Fern McKinnon, Joanne Talty)
- Nano Fabrication Laboratory - Clean Room (Tom Ferraguto and Jay Goodman)
- Shareable Knowledge @the UML Libraries: Digital Pathfinders, Digital Briefings, Digital Portfolios (George Hart)
- UMass Buy Ways System (Tom Hoole)
- Everything you would like to know about the Institutional Review Board (Elaine Major, Doreen Arcus)
- Qualtrics Survey/Data Collection tool for Academia

### Research Collaborations

- EBites Seminars were presented as part of U.S. Army Natick Soldier Research development UML Scientific Exchange (NUSE) to familiarize faculty with potential HEROES collaborations
  - Dr. Ramanathan Nagarajan, Molecular Sciences and Engineering Team, Interactions of antimicrobial peptides with model bilayer membranes
  - Dr. Natalie Pomerantz, Materials Engineer, Chemical Protective Wear: A Multi-layered Approach
  - Quoc Truong, Physical Scientist, Omniphobic Coating for Self-Cleaning and Enhanced Chemical/Biological Protective Clothing.

More info at: <http://www.uml.edu/Research/Faculty-Research/Lunch-Lecture/>

## Students (Undergraduate and Graduate)

### Adrianna (Andy) Morris

Assistant to the Vice Provost for Research  
Program Director, Campus Research Co-ops  
Tel. 978.934.2898

### Undergraduate Research Program (Co-op Scholars)

The co-op scholar program provides a \$4,000 co-op opportunity to high achieving incoming early action freshmen who maintain a required GPA, typically 3.0 or 3.25, during their freshmen year. The program began with a pilot of 18 engineering students during the summer of 2011. This experiential learning opportunity is very attractive as demonstrated by the to-date 34% yield for top incoming in-state freshmen who are offered a co-op as compared to the 29.5% overall yield of incoming freshmen (AY 2013-2014).

Number of Co-op Scholars since the first official class (Fall 2011):

College	AY 2011-2012	AY 2012-2013
Engineering	57	89
FAHSS	28	48
Management	5	16
Science	23	54
Health	33	17
<b>TOTAL</b>	<b>146</b>	<b>224</b>

*"I feel my co-op has made me a better-rounded student and an advanced learner, and I would urge other students to take advantage of this unique opportunity to learn skills they might not necessarily learn in a classroom."*

*~ Shelby Creamer, Nursing*

- We thank the **86 Faculty Mentors** who worked with these Co-op Scholars (see next page)
- Students participated in many exciting and rewarding, hands-on learning experiences, e.g.
  - Improving drug development efficiency
  - Processing and testing plastics
  - Merrimack Housing Partnership
  - Sustainable Farming Project
  - Lowell General Hospital Maternal Child Health Education
- Summer Co-op Scholars participated in:
  - Communication workshop conducted by the Museum of Science
  - Two-part workshop on creating effective posters (as preparation for the Student Research and Community Engagement Symposium)
- Program follow-up
  - Twenty seven students who have participated in this co-op scholar program have transitioned to professional co-ops in such companies as Genzyme, Pfizer, General Electric, Proctor and Gamble/Gillette, Millipore and others
  - Other students have remained working in the lab of their mentor.

Check out the posters hanging throughout the campus, and read other stories:

<http://www.uml.edu/Research/Student-Opportunities/Undergraduate-Research/Stories.aspx>

**Co-op Scholar Mentors***Thank you for your service*

<b>College of Health Sciences</b>			
<b>Clinical Lab and Nutritional Sciences</b>	<b>Exercise Physiology</b>	<b>Nursing</b>	<b>Work Environment</b>
Susan He	Sean Collins	Laura Hajjar	Laura Punnett
Mahdi Galenrabi	Gerry Dybel	Ainat Koren	
Nancy Goodyear	Nancy Ferrara		
	Erika Lewis		
	Deirdra Murphy		

<b>College of Sciences</b>				
<b>Biology</b>	<b>Chemistry</b>	<b>Computer Science</b>	<b>Mathematics</b>	<b>Physics</b>
Susan Braunhut	Melisenda McDonald	Jim Canning	Dimitris Christodoulou	Leo Bobek
Peter Gaines	Dan Sandman	Byung Kim	Shelly Rasmussen	Partha Chowdhury
Jessica Garb	James Whitten	Haim Levkowitz		Silas Laycock
Garth Hall	Jin Xu	Fred Martin	<b>EEAS</b>	Mengyan Shen
Naomi Wernick		Holly Yanco	Jian Hua Qian	

<b>Francis College of Engineering</b>				
<b>Chemical Engineering</b>	<b>Civil Engineering</b>	<b>Electrical and Computer Eng</b>	<b>Mechanical Engineering</b>	<b>Plastics Engineering</b>
Zhiyong Gu	Pradeep Kurup	Alkim Akyurtlu	Chris Hansen	Bridgette Budhlall
Nese Orbey	Tzu-Yang Yu	Yan Luo	Ioannis Raptis	Steve Johnson
Prakash Rai		Martin Margala	Emmanuelle Reynaud/ Linda Barrington	Dave Kazmer
John White		Dalila Megherbi	Jim Sherwood/ Patrick Drane	Bob Malloy
Seongyuk Yoon		Samson Milshtein	Juan Pablo Trellis	Joey Mead
			David Willis	Ramaswamy Nagarajan
				Amad Tayebi

<b>Manning School of Business</b>	<b>FAHSS</b>		
Frank Andrews	Michael Testa (Music)	David Turcotte (Economics)	Michael Millner (English)
Deborah Finch	Gena Greher (Music)	Steve Mishol (Art)	Jonathan Silverman (English)
Ashwin Mehta	John-Morgan Bush (Music)	Carol Salmon (Cultural Studies)	James Forest (CJ)
David Ornstill	Alex Ruthman (Music)	Morgan Marietta (Pol Sci)	Stephanie Block (Psych)
Hongwei Zhu	Alex Case (Music)	Ardeth Thawngmung (Pol Sci)	Christopher Carlsmith (History)
	Shelly Barish (Theatre Arts)	John Wooding (Pol Sci)	Paul Marion (Staff)
	Brian Saxton (Theatre Arts)	Dale Young (Theatre Arts)	Christine Gillette (Media Services)

## Graduate Research Assistants

### Amber Squires

Research/Budget Administrator

Tel. 978.934.4858

#### Faculty funded 387 Graduate Research Assistant contracts for FY13

*(half/full, semester/academic year)*

##### College of Engineering

Department	Fall Semester	Spring Semester	Academic Year
Chemical Eng.	7	7	
Civil Eng.	12	10	3
Elec. & Comp.	30	28	18
Mechanical Eng.	12	15	13
Plastics Eng.	22	17	22
<b>Total:</b>	<b>83</b>	<b>77</b>	<b>56</b>

##### College of Health Sciences

Department	Fall Semester	Spring Semester	Academic Year
CLNS	1	1	
Physical Therapy	2		
TURI			6
Work Environment	4		10
<b>Total</b>	<b>7</b>	<b>1</b>	<b>16</b>

##### College of Sciences

Department	Fall Semester	Spring Semester	Academic Year
Biology	2	1	
Chemistry	3	2	5
Computer Science	17	14	17
Ctr. Atmosph.	3	3	3
EEAS			1
Marine Sciences			1
Physics	22	17	22
STL			4
<b>Total</b>	<b>47</b>	<b>37</b>	<b>53</b>

##### FAHSS, GSE & Management

Department	Fall Semester	Spring Semester	Academic Year
Criminal Justice	2	1	
Ctr. Family Work		2	
Psychology		1	
<b>FAHSS Total:</b>	<b>2</b>	<b>3</b>	
MGMT/OIS	2		
<b>MGMT Total:</b>	<b>2</b>		
GSE		1	1
<b>GSE Total:</b>		<b>1</b>	<b>1</b>



## Core Research Facilities

### Theresa (Teri) Hamelin

Business Manager, Core Research Facilities  
Tel. 978.934.6421



Website: <http://www.uml.edu/research/CRF/>

Core Research Facilities (CRF) at UMass Lowell have a mission to provide world-class instrumentation and facilities to our faculty researchers and to prepare our students as the next generation of researchers. We share our scientific expertise and capabilities with the research community.

The CRF program was launched in January 2013, with the Materials Characterization Lab as the first CRF. Since then, we have: (1) **added 3 more CRFs**; (2) **expanded the CRISP™ searchable database to over 400 instruments**; and (3) **added 37+ industry partners** (to both support local companies and share in the cost of maintaining and expanding our CRFs).

Core Research Facilities	Lab Director/Manager	Fully operational Date	# of Resources
Materials Characterization Lab (MCL)	Earl Ada, Ph.D	January 2013	29
NERVE Robotics Center	Adam Norton	September 2013	31
Thermal & Mechanical Properties Lab (TMP)	Vitaly Benkin	December 2013	4
NanoFabrication Lab (NFL)	Thomas Ferraguto	February 2014	34
CRISP™ Database (searchable equipment)	Teri Hamelin	On-going	423

- In its first year as a CRF, **the MCL more than tripled its revenues** (to \$96K).
- The MCL provided access to 72+ student self-users working for some 36+ faculty.
- We thank our User Committees who help guide strategic decisions on equipment, budgets, policies, etc.

<b>MCL User Committee</b> Dan Schmidt, Plastics Engineering (Chair) Carol Barry, Plastics Engineering Dhimiter Bello, Work Environment Peter Gaines, Biology Zhiyong Gu, Chemical Engineering Christopher J. Hansen, Mechanical Engineering Jayant Kumar, Physics and Applied Sciences Mingdi Yan, Chemistry Jim Whitten, Chemistry	<b>NFL User Committee</b> Craig Armiento, Elec & Computer Eng (Chair) Joel Therrien, Elec & Computer Engineering Hongwei Sun, Mechanical Engineering TBD  <b>NERVE User Committee (pending)</b> Holly Yanco, Faculty Director  <b>TMP User Committee (pending)</b>
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### Industry Users (37+)

Applied Research Associates, APorous, Boston Engineering, Bemis Associates, Brooks Automation, E Ink, Foster, EIC Laboratories, Greentech, Great Bay Process Solutions, JEOL USA, iRobot, Luminus Devices, Kazmer Research, Materials Systems, MACOM Technology Solutions, MEMSIC, MC10, MicroChem, MicroVision Labs, MKS Instruments, Novarials, Parker Hannifin Chomerics, Modern Dispersions, Prime Organics, Polnox, Prysm, Privo Technologies, QmagiQ, PVD Products, Spectro, Ramgoss, Teknor Apex, Strohl Medical Technologies, US Army RDEC, UFP Technologies, Vista Scientific, Viata

## New Venture Development

### Nancy Saucier

Director

Tel. 978.934.3212

### Establishment of the New Venture Initiative

NVI is a new model for University cultivation of start-up activity. Launched late last year, NVI provides a path for university-owned innovation to become a start-up. Additionally, it provides enhanced mechanisms, support and resources for external start-ups seeking to do business with the University. NVI is a mix of University resources and equity investment designed to provide a path to and facilitate more start-up activity at UMass Lowell.

To date, the Initiative has more than \$350,000 to commit to commercialization efforts in the form of grants and debt equity investments—the result of successful licensing and UMass Lowell Alumni contributions.

Source	Capital to Date
UML Alumni	\$100,000
UML Licensing Revenue for NVD Seeding	\$134,000
UML Commercialization Grant Fund	\$120,000
Total	\$354,000

### Supporting and Winning Commercialization Grants

In an effort to take advantage of additional commercialization efforts at the University, the New Venture staff has worked closely with several faculty in the active pursuit of federal grants. This includes a \$100k Partnership in Innovation: Accelerating Research-Technology Translation proposal with Prof. Pradeep Kurup for the E-Tongue (pending) and two \$50k NSF I-Corps grants with Prof. Xingwei Wang for the fiber-optic ultrasound project (awarded 1/18) and with Prof. Xinwen Fu for HAWKeel: 3<sup>rd</sup> Party Localization.

Additionally, the New Venture team has assembled a group of both internal and external resources in anticipation of the development of an NSF I-Corps Site proposal due in July 2014 that could provide up to \$100k in operations and internal grant funding here at UMass Lowell.

### Commercialization Mentoring

NVI has established a service for actively matching faculty projects and teams with start-up potential to both internal and external mentors. These mentors include faculty, alumni, and corporate connections. This Mentor Program is a committed network of mentors with a broad set of skills and professional experiences assisting UMass Lowell entrepreneurs in building knowledge and growing start-ups. The Mentor Program website is currently under development and will be launched this Spring.

## Commercial Ventures & Intellectual Property (CVIP)

**Jill Murthi**

Director

Tel. 978.934.4722

The mission of UMass Lowell's CVIP office is to facilitate the transfer of technology arising from government, foundation and industrial sponsored research to the private sector. We aid the development of inventions toward commercial relevance and utility, nurture mutually beneficial and sustainable relationships between the University and industry, promote innovative and entrepreneurial culture at the University, and contribute to the economic vibrancy and well-being of the Commonwealth. CVIP's activities enable the successful transfer of commercially viable technology from the laboratory to the marketplace for public use and benefit.

### INTELLECTUAL PROPERTY

Metric	College / School of Lead PI			Total
	Engineering	Sciences	Health Sciences	
<b>Inventions Reported</b>	<b>16</b>	<b>8</b>	<b>2</b>	<b>26</b>
<b>Patent Applications Filed</b>	<b>8</b>	<b>20</b>	<b>5</b>	<b>33</b>
<b>Patent Applications Published</b>	<b>11</b>	<b>8</b>	<b>1</b>	<b>20</b>
<b>Patents Issued</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>8</b>

### AGREEMENTS

Licenses: 1

Options: 6

Confidentiality (CDA): 69

Material Transfer (MTA): 10

Inter-Institutional (IIA): 2

### UMPO Technology Development Awardees FY13

PI(s)	Dept	Technology	Award Amt	Year
Kurup, Pradeep	Civil Eng	Electronic Tongue	\$25,000	FY13
Sajo, Erno	Physics	Enhancing Image Resolution in X-ray Imaging	\$25,000	FY13
Schmidt, Daniel	Plastics Eng	Active Plastics as a Novel Anti-Fungal Strategy	\$25,000	FY13

## Patents Issued in FY13

Invention(s)	Issued Patent No.	Country of Filing	Intellectual Property Title	Inventor(s)	Issue Date
2005-006	ZL200680034259.1	China	Compositions and Methods for Making and Using Nanoemulsions	<b>Robert J Nicolosi*</b> ; <b>Thomas Wilson</b> ; Robert Fisher	22-May-13
2005-006	2006346369	Australia	Compositions and Methods for Making and Using Nanoemulsions	<b>Robert J Nicolosi*</b> ; <b>Thomas Wilson</b> ; Robert Fisher	06-Jun-13
2005-008	US 8,349,991	United States	Amphiphilic Polymers and Methods of Use Thereof	Rajesh Kumar; <b>Arthur C. Watterson*</b> ; Robert Fisher; Virinder Singh Parmar; Clark Colton; <b>Jayant Kumar</b>	08-Jan-13
2005-011 2007-018	US 8,271,241	United States	Chiral Metamaterials	<b>Kenneth A Marx*</b> ; <b>Alkim Akyurtlu</b> ; Nantakan Wongkasem	18-Sep-12
2006-003	US 8,318,181	United States	Botulinum Nanoemulsions	<b>Robert J Nicolosi*</b> ; Jon Edelson	27-Nov-12
2007-005	EP 2,094,738	Europe - EPO Application	Functional Hydrocarbon Polymers and Process for Producing Same	<b>Rudolf Faust*</b> ; Umaprasana Ojha	27-Feb-13
2009-022	US 8,250,903	United States	Exhaled Breath Particle Collector	<b>Don Milton*</b>	28-Aug-12
2012-004	US 8,465,655	United States	Method Of Manufacturing Polymer Nanopillars By Anodic Aluminum Oxide Membrane And Imprint Process	<b>Hongwei Sun*</b> ; Sai Lui	18-Jun-13

Note: Names in bold indicate current UMass Lowell faculty member or emeritus.

Note: \*Indicates principal investigator.

## Patent Applications Published in FY13

Invention #	Appl Filing Date	Appl Type	Inventor(s)	Intellectual Property Title	Patent Appl Publ No.	Publ Date
2001-014	02-Apr-12	Cont	<b>Thomas Shea*</b> ; <b>Eugene Rogers</b>	Formulations for Reducing Neuronal Degeneration	US 2012/0252750	04-Oct-12
2005-006	05-Feb-13	Div	<b>Thomas Wilson</b> ; Robert Fisher; <b>Robert Nicolosi*</b>	Compositions And Methods For Making And Using Nanoemulsions	US 2013/0200590	10-Mar-13

2008-020	09-Jan-12	Natl	Scott Wharram; David Kaplan; <b>Stephen McCarthy*</b> ; Xiaohui Zhang	Electrospun Silk Material Systems for Wound Healing	US 2012/0171256	05-Jul-12
2009-003	20-Nov-12	Cont	Umaprasana Ojha; <b>Rudolf Faust*</b>	Polysobutylene-Based Polyurethanes	US 2013/0079487	28-Mar-13
2009-025	06-Mar-12	Natl	Sharavan Balasubramaniam; <b>Julie Chen; Ramaswamy Nagarajan*</b> ; <b>Joey Mead</b> ; Jungrae Park	Wireless Passive Radio-Frequency Strain And Displacement Sensors	US 2012/0297888	29-Nov-12
2009-031	26-Oct-12	Natl	Isso Bayala; <b>David Ryan*</b> ; <b>Eugene Rogers</b>	Reduction of Alpha-Tocopherol Quinone	US 2013/0041164	14-Feb-13
2010-003	27-Apr-12	PCT	<b>Daniel Schmidt*</b>	Bisphenol A (BPA) Free Epoxy Resins	WO 2012/149340	01-Nov-12
2010-007	30-Dec-11	PCT	<b>Peter Gaines; Emmanuelle Reynaud; Daniel Schmidt*</b>	Responsive Gel Culture Hydrogel	WO 2012/092542	05-Jul-12
2010-011	30-Apr-12	PCT	<b>Jayant Kumar; Ramaswamy Nagarajan*</b> ; Bon-Cheol Ku; E. Bryan Coughlin; Sethumadhavan Ravichandran; Subhalakshmi Nagarajan	Flame-Retardant Derivatives	WO 2012/151154	08-Nov-12
2010-018	24-Oct-12	PCT	Cong Wang; <b>Mengyan Shen*</b>	Catalysts By Dispersion Of Nanoparticles Onto Support Structures	WO 2013/063064	05-Feb-13
2010-028	09-Feb-12	PCT	<b>Sanjeev Manohar*</b> ; Syed Hasan; Srikanth Ammu	Detection Of Endotoxins	WO 2012/109473	16-Aug-12
2011-001	20-Feb-13	Natl	<b>Holly Yanco*</b> ; Mark Micire; Adam Norton; Eric McCann	Hand And Finger Registration For Control Applications	US 2013/0207920	15-Aug-13
2011-003	22-Feb-13	Natl	<b>Daniel Schmidt*</b>	Bisphenol A (BPA) Free Epoxy Resins	US 2013/0150533	13-Jun-13
2011-009	18-Nov-11	Util	<b>Susan Braunhut; Kenneth Marx; Joel Therrien*</b> ; Gang Wang; Malavika Vashist; Abiche Dewilde; Jianping Zhang	Acoustic Wave (AW) Sensing Devices Using Live Cells	US 2012/0258444	11-Oct-12
2011-009	18-Nov-11	PCT	<b>Susan Braunhut; Kenneth Marx; Joel Therrien*</b> ; Gang Wang; Malavika Vashist; Abiche Dewilde; Jianping Zhang	Acoustic Wave (AW) Sensing Devices Using Living Cells	WO 2013/074125	23-May-13
2011-011	17-Feb-12	PCT	<b>Xingwei Wang*</b> ; Nan Wu	Photoacoustic Probe	WO 2012/112890	23-Aug-12
2011-018	17-Feb-12	PCT	<b>Anna Yaroslavsky*</b> ; Dennis Wirth	Devices And Methods For Optical Pathology	WO 2012/112911	23-Aug-12

2011-026	23-May-12	PCT	<b>David Kazmer*</b>	Apparatus And Methods For Multi-Scale Alignment And Fastening	WO 2012/162369	29-Nov-12
2012-003	14-Dec-12	PCT	<b>Rudolf Faust*</b> ; Philip Dimitrov; Rajeev Kumar; Jack Emert; Jun Hua	Polymerization Initiating System And Method To Produce Highly Reactive Olefin Functional Polymers	WO 2013/090764	20-Jun-13
2012-003	16-Dec-11	Util	<b>Rudolf Faust*</b> ; Philip Dimitro; Rajeev Kumar; Jack Emert; Jun Hua	Polymerization Initiating System And Method To Produce Highly Reactive Olefin Functional Polymers	US 2013/0158217	20-Jun-13

**Note:** Names in bold indicates current UMass Lowell faculty member or emeritus.

**Note:** \*Indicates principal investigator.

### Faculty Invention Disclosures FY13\*

Faculty Member	College	Department	No. of CIDs
Nagarajan, Ramaswamy	Engineering	Plastics Engineering	3
Yoon, Seongkyu	Engineering	Chemical Engineering	3
Hansen, Christopher	Engineering	Mechanical Engineering	2
Manohar, Sanjeev	Engineering	Chemical Engineering	2
Mil'shtein, Samson	Engineering	Electrical & Computer Engineering	2
Sajo, Erno	Sciences	Physics & Applied Physics	2
Akyurtlu, Alkim	Engineering	Electrical & Computer Engineering	1
Bannister, William	Sciences	Chemistry	1
Buchholz, Bryan	Health Sciences	Work Environment	1
Cifuentes, Manuel	Health Sciences	Work Environment	1
Driscoll, Stephen	Engineering	Plastics Engineering	1
Faust, Rudolf	Sciences	Chemistry	1
Fu, Xinwen	Sciences	Computer Science	1
Kazmer, David	Engineering	Plastics Engineering	1
Kurup, Pradeep	Engineering	Civil & Environmental Engineering	1
Lai, Fang	Engineering	Plastics Engineering	1
Rai, Prakash	Engineering	Chemical Engineering	1
Sun, Hongwei	Engineering	Mechanical Engineering	1
Therrien, Joel	Engineering	Electrical & Computer Engineering	1
Whitten, James	Sciences	Chemistry	1
Yaroslavsky, Anna	Sciences	Physics & Applied Physics	1
Yu, Tzu-Yang	Engineering	Civil & Environmental Engineering	1

**\*Note:** Faculty members are acknowledged for each disclosure in which they are a named coinventor.

## Institutional Compliance

### Elaine Major

Director

Tel. 978.934.3452

**The Office of Institutional Compliance (OIC)** is responsible for UMass Lowell's compliance with *federal*, *state*, and *local* regulations related to export controls, research activities with human subjects, animals and use of biohazardous materials and managing conflicts of interest. Regulations are increasingly becoming more difficult to understand and navigate. OIC staff is available to assist faculty, staff and students to understand and comply with the increasingly complex regulations.

### OIC Staff:

Thomas Porro, Export Control Compliance Manager

Amy Finneral, Animal Research Compliance Manager

Emily Sousa, IBC and IRB Administrator

### Export Compliance Data

Type of OIC Review	2012	2013
<b>International Travel</b>	109 TAs to 42 countries and 60 Ann. Cert. Letters	311 TAs to 68 countries and 86 Ann. Cert. Letters
<b>Research Sponsors Vetted</b>	77 new	186 new
<b>Visa Sponsor Letters</b>	58 new from 19 Depts	88 from 22 Depts.
<b>Physical Exports</b>	29 sent from 18 employees to 20 countries	70 sent from 39 employees to 27 countries
<b>MOUs</b>	15 from 12 countries	19 from 12 countries
<b>Research Services Agreements</b>	34	36 reviewed
<b>International Visitors (in addition to Sponsored visits)</b>	16 requests for approx. 60 visitors	85 requests for 191 visitors
<b>Review of ORA Grants/Contracts/Proposals</b>	2	46; 27 sent for OIC review and 19 audited for E.C.
<b>NDA/CDA/MTA Reviews (began Oct. 2013)</b>	N/A*	66
<b>Iranian Student Checks (began Sept. 2012)</b>	Not recorded	19
<b>Suspicious Contact Reports</b>	Not recorded	8-all confirmed as suspicious
<b>Purchases (began Oct. 2013)</b>	Not recorded	1700 P.O.s

\*N/A= data not available or OIC was not collecting this information to facilitate reporting.

Protocol Submissions	IACUC New(Active)	IBC New	IRB New* (number by category)	IRB Open Protocols
2009	13 (12)	8	127 (36 exempt, 86 expedited, 5 full review)	
2010	15 (25)	23	150 (52 exempt, 91 expedited, 7 full review)	
2011	8 (25)	12	164 (54 exempt, 107 expedited, 3 full review)	286
2012	11 (24)	19	171 (61 exempt, 85 expedited, 3 full)	259
<b>2013</b>	<b>6 (12)</b>	<b>18</b>	<b>202* (84 exempt, 187 expedited, 13 full review)</b>	<b>305</b>

\*2013 Average time for approval (exempt 8 days, expedited 20 days, full 34 days)



**FY14 Compliance Oversight Committee Members**

*Thank you to all of the Research Oversight Committee Members for your hard work and dedication throughout the year! Without your efforts, we would not be able to support faculty research activities.*

**Institutional Animal Care and Use Committee (IACUC)**

Peter Gaines, Chair, Biology  
 Thomas Wilson, Vice-Chair, Clin Lab & Nutr Sci  
 Susan Woskie, Faculty, Work Env  
 Prakash Rai, Faculty Chemical Eng  
 Mahdi Garelnabi, Faculty, Clin Lab & Nutr Sci  
 Karen (Chur) Masors, Staff, Biology  
 Jonathan MacKenzie, Community Member  
 Glenn MacDonald, Staff, EHS Associate Dir  
 Amy Finneral, OIC, Animal Research Compl Mgr  
 Elaine Major, OIC, Director  
 Scott Perkins, Attending Veterinarian

**Institutional Review Board (IRB)**

Doreen Arcus, Chair, Psychology  
 Jill Lohmeier, Vice-Chair, Grad Sch Edu  
 Joyce White, Faculty, Physical Therapy  
 Maria Brunette, Faculty, Work Env  
 Robin Toof, Staff, Ctr for Comm Research & Eval  
 Margaret Knight, Faculty, Nursing  
 Leland Ackerson, Faculty, Comm Health & Sustainability  
 Linda Williams, Faculty, Crim & Justice Studies  
 Melissa Morabito, Faculty *alternate*, Crim & Justice Studies  
 Karen Melillo, Faculty *alternate*, Nursing  
 Paulette Renault-Caragianes, Community Member  
 Sidney Liang, Community Member  
 Emily Sousa, OIC, IRB Administrator  
 Elaine Major, OIC, Director

**UMass Lowell Conflicts Committee**

Julie Chen, Vice Provost for Research  
 Elaine Major, OIC Director  
 Sanjeev Manohar, Chemical Engineering *alternate*  
 (Campus Rep to Systemwide Conflicts Comm)  
 Carl Lawton, Chemical Engineering  
 Tom Gordon, Psychology

**Institutional Biosafety Committee (IBC)**

Susan Woskie, Chair, Work Environment  
 Nancy Goodyear, Vice-Chair, Clin Lab & Nutr Sci  
 Dhimiter Bello, Faculty, Work Env  
 Peter Gaines, Faculty, Biology  
 Guixin (Susan) He, Faculty, Clin Lab & Nutr Sci  
 Ruth Medina, Biosafety Officer, EHS  
 Donata Vespa, Research Technician, Chemical Eng  
 Anthony Gemmellaro, Community Member  
 Sharon Marsh, Community Member  
 Karen (Chur) Masors, Staff, Biology  
 Emily Sousa, OIC, IBC Administrator  
 Elaine Major, OIC, Director

**UMI Export Control Oversight Committee**

Julie Chen, Vice Provost for Research  
 Linda Concino, ORA Director  
 Elaine Major, OIC Director  
 Thomas Porro, Export Control Compliance Mgr  
 Joseph Hartman, Dean, Francis College of Eng  
 Mark Hines, Dean, College of Sciences  
 Robert Giles, Chair, Physics  
 Craig Armiento, Faculty, Elec & Comp Eng  
 Peter Gaines, Faculty, Biology  
 Joey Mead, Faculty, Plastics Engineering  
 Jack Wilson, President Emeritus

Doreen Arcus, Psychology *alternate*  
 Lorraine Dagostino, Graduate School of Education  
 James Carifio, Graduate School of Ed *alternate*  
 Bob Li, Operations & Information Systems  
 Shellie Simons, Nursing  
 Margaret Knight, Nursing *alternate*  
 Jayant Kumar, Physics



## Research Administration

### Linda Concino

Director

Tel. 978.934.4723

The Office of Research Administration works with faculty on proposal submissions, funding opportunities, interactions with program managers, and negotiations of grants and contract agreements. ORA also works closely with Research Accounting (under Finance and Operations) to assist with no-cost extensions, budget modifications, and other project management.

- **FY13: Continued growth in awards received (5% over FY11 (ARRA), 18% over FY12)**
- *Note: Awards can display some volatility due to large multi-year grants or equipment grants showing up in a given year, but are generally representative of future expenditures capacity.*

#### Annual Awards Received – By College

	2011	2012	2013
Sciences	\$ 11,309,010	\$ 15,501,608	\$ 17,908,212
FAHSS	\$ 2,620,669	\$ 984,223	\$ 2,607,608
Grad Sch of Ed	\$ 1,250,108	\$ 3,420,865	\$ 3,160,652
Engineering	\$ 12,577,807	\$ 7,203,604	\$ 8,897,183
Health Sciences	\$ 9,216,305	\$ 5,446,059	\$ 5,874,597
MSB	\$ 3,000	\$ 237,464	\$ 228,045
Univ	\$ 726,304	\$ 811,002	\$ 1,060,165
<b>Total</b>	<b>\$ 37,703,203</b>	<b>\$ 33,604,825</b>	<b>\$ 39,736,463</b>

- **FY13: 445 total proposals submitted!**

	Proposals Submitted	Total Amount Requested
College of Sciences	154	\$ 64,801,666
College of Fine Arts, Humanities & Social Sciences	53	\$ 7,286,809
Graduate School of Education	13	\$ 1,022,056
College of Engineering	156	\$ 34,723,172
College of Health Sciences	62	\$ 21,297,674
Manning School of Business	3	\$ 1,078,009
University Level	4	\$ 390,813
<b>Total</b>	<b>445</b>	<b>\$130,600,199</b>

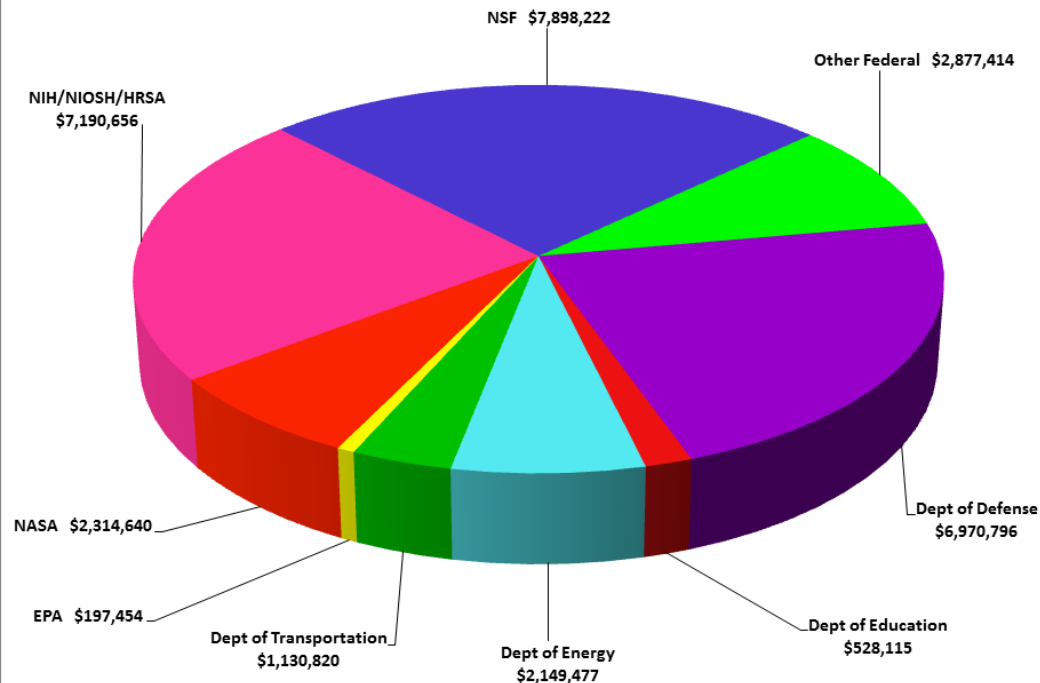
PI	Amount	PI	Amount
Giles,Robert H	\$4,186,019	Brown,Gilbert	\$256,890
Mead,Joey L., Barry, Carol F.	\$1,685,968	Lu,Xuejun	\$246,374
Slatin,Craig	\$1,358,024	Houde,Susan C.	\$245,371
Punnett,Laura	\$1,340,046	Yan,Mingdi	\$232,181
Montesalvo,Mary A	\$845,673	Avitabile,Peter	\$228,941
Greenwood,Anita	\$740,576	Harris,Andrew	\$228,121
Kriebel,David	\$633,283	Tries,Mark A.	\$224,094
Chowdhury,Partha, Lister, Christopher	\$616,830	Prasad,Kanti	\$216,632
Quinn,Margaret M.	\$547,478	Niezrecki,Christopher	\$214,973
Xu,Jin	\$534,849	Barry,Carol M.F.	\$214,418
Yanco,Holly	\$533,967	Lawton,Carl W.	\$197,594
Yu,Tzu-Yang	\$523,972	Williams,Linda	\$193,664
Cook,Timothy	\$503,881	Ellenbecker,M J	\$186,235
Chiang,Long Y	\$461,596	Guo,Hwai-Chen F.	\$181,190
Grinstein,Georges	\$459,694	Wang,Xingwei	\$178,351
Xie,Yuanchang	\$408,160	Rai,Prakash	\$177,784
Chandra,Kavitha	\$380,676	Yoon,Seongkyu	\$174,682
Moloney,Jacqueline	\$374,175	Fu,Xinwen	\$172,593
Galkin,Ivan	\$372,175	Rooney-Varga,Juliette N.	\$162,424
Sun,Yuyu	\$366,353	Kuhn,Sarah	\$151,069
Sherwood,James A.	\$356,033	Scribner-Maclean,Michelle	\$150,251
Kirschbaum,Sheila L.	\$347,890	Whitten,James E.	\$149,994
Chen,Julie	\$344,997	Flum,Marian	\$146,197
Kumar,Jayant	\$338,262	Hoppin,Polly	\$144,677
Akyurtlu,Alkim	\$328,663	Hu,Tingshu	\$144,206
Song,Paul	\$319,691	Handelman,Garry J	\$143,232
Tickner,Joel	\$318,056	Gatesman,Andrew J.	\$141,414
Chen,Guanling	\$316,034	Sama,Susan R.	\$138,325
Shen,Mengyan	\$300,769	Hochberg,Rick	\$137,039
Boccia,Judith A	\$297,517	Li,Xiaobai	\$135,109
Roelofs,Cora R	\$295,630	Wyman-Colombo,Michaela	\$131,573
Budhlall,Bridgette	\$294,135	Ruths,Marina C.	\$131,278
Martin,Fred	\$293,569	Lazonick,William H.	\$127,589
Kazmer,David O	\$292,651	Willis,David J.	\$127,339
Podolskiy,Viktor	\$290,895	Bello,Dhimiter	\$127,255
Turcotte,David	\$288,400	Buchholz,Bryan O	\$125,427
Faust,Rudolf	\$279,334	Watterson Jr,Arthur	\$125,394
Woskie,Susan	\$272,942	McCarthy,Stephen P.	\$125,098
Shea,Thomas B.	\$265,789	McDonough, Carol	\$122,901

PI	Amount	PI	Amount
Lustick, David	\$122,206	Pattavina, April F.	\$57,114
Kurup, Pradeep U.	\$121,446	Faraji, Susan	\$56,611
Johnston, Stephen P.	\$118,981	Chakrabarti, Supriya	\$55,441
Weitzen, Jay A	\$114,248	Toof, Robin	\$55,255
French, Clayton S	\$112,694	Braunhut, Susan J.	\$51,041
Melillo, Karen D	\$107,981	Chigan, Chunxiao	\$49,881
Geiser, Ken	\$106,510	Pakstis, John C.	\$46,769
Levasseur, Kenneth M	\$104,850	Abdallah, Lisa M.	\$42,520
Yaroslavsky, Anna	\$104,133	Hansen, Christopher J	\$41,674
Orbey, Nese	\$103,681	Wang, Jie	\$41,286
Gamache, Robert R.	\$101,094	Knight, Margaret	\$38,979
Ge, Tingjian	\$100,816	Simons, Shellie R.	\$38,979
Duffy, John	\$100,702	Mil'shtein, Samson	\$38,828
Nagarajan, Ramaswamy	\$99,467	Kim, Byungki	\$38,443
Liu, Benyuan	\$99,337	Seymour, Connie J	\$37,100
Goodhue, William D.	\$97,690	Ambe, Elizabeth B.	\$37,088
Gu, Zhiyong	\$94,866	Bobek, Leo M.	\$35,107
Reynaud, Emmanuelle	\$91,155	Serna, Richard	\$34,371
Motiwalla, Luvai F.	\$90,073	Jahngen, Edwin G	\$33,147
Gartner, Nathan	\$89,806	Greher, Gena R.	\$32,911
White, John R	\$89,559	Ruthmann, Stephen A.	\$32,911
Lohmeier, Jill	\$84,977	Kim, Min Jeong	\$29,909
Therrien, Joel M.	\$82,585	Driscoll, Stephen B	\$29,859
Sun, Hongwei	\$79,979	Ossen, Vera M	\$28,361
Gaines, Peter C.	\$76,576	Luo, Yan	\$28,018
Manohar, Sanjeev	\$75,267	Barsegov, Valeri	\$26,971
Champagne, Nicole J.	\$73,233	Sobkowicz Kline, Margaret J	\$26,125
Dowling, Jacqueline	\$71,066	Lages, Ana Christina Argolo	\$26,070
Propp, James	\$70,983	Mass, William	\$25,527
Clark, Donn A.	\$70,370	Collins, Sean M.	\$24,100
Garb, Jessica E.	\$68,995	Winning, Susan	\$23,758
Heines, Jesse M	\$65,822	Koren, Ainat	\$23,510
Fisher, William H	\$65,252	Paikowsky, Samuel	\$23,113
Schmidt, Daniel	\$64,479	Ryan, David K	\$22,214
Montrie, Chad	\$63,826	Cheng, Wei	\$21,610
Barlow, Mathew	\$62,184	Roehr, Karen E	\$20,890
Aghara, Sukesh	\$62,063	Archibald, Diana C.	\$20,377
Mandell, Charlotte C	\$57,281	Morabito, Melissa Schaefer	\$19,827

PI	Amount	PI	Amount
Saenko, Ekaterina	\$17,188	Zong, Qiugang	\$4,414
Tran, Nellie	\$17,114	Tsai, Su-Jung	\$3,724
Fisher, Joseph M.	\$16,854	Shellman, Juliette	\$3,540
Malloy, Robert A	\$16,211	McDonald, Melisenda J.	\$3,462
Donatelli, Alfred A	\$16,048	Walkinshaw, John W	\$3,304
Hillier, Ashleigh J.	\$14,932	Margala, Martin	\$2,782
Roberts, Kay	\$14,802	Reid, Joan	\$2,652
Pierson, Donald E	\$14,775	Shina, Sammy G	\$2,651
Lee, Kenneth Y.	\$14,714	Mawn, Barbara	\$2,292
Lister, Christopher J	\$14,280	Hines, Mark E.	\$2,277
Orroth, Stephen A	\$14,237	Wilson, Thomas A.	\$1,525
Cifuentes, Manuel	\$13,900	Remington, Ruth	\$1,510
Swanger, Kate MacKenzie	\$13,622	Huang, Ying	\$1,500
Wei, Ming (Mead)	\$13,557	Marks, Sara	\$1,013
Rayman, Paula M	\$13,422	Bruce, Alease	\$1,003
Sandman, Daniel J.	\$13,124	Graves, Michael V.	\$805
Sajo, Erno	\$12,258	Gagnon, Michele A	\$613
Ho, Ivy K.	\$11,409	Salameh, Ziyad M	\$550
Lahiri, Supriya	\$10,601	Beke, Tibor	\$506
Lai, Fang S	\$9,944	Forrant, Robert	\$491
Nannini, Angela M.	\$9,579	Petrie, Stephen	\$268
Qian, Xifeng	\$8,822	Mahd, Mufeed M.	\$111
Ferrara, Cynthia	\$8,355	Jones, Lee K	\$94
Murphy, Deirdra A.	\$8,355	Wasserman, Daniel M.	\$85
Bond, Meg A.	\$8,191	Niemi Jr, Eugene E	\$76
Laycock, Silas	\$6,223	Rogers, Eugene J	\$19
Karasek, Robert A	\$5,851	Lucas, F. Michael	\$1

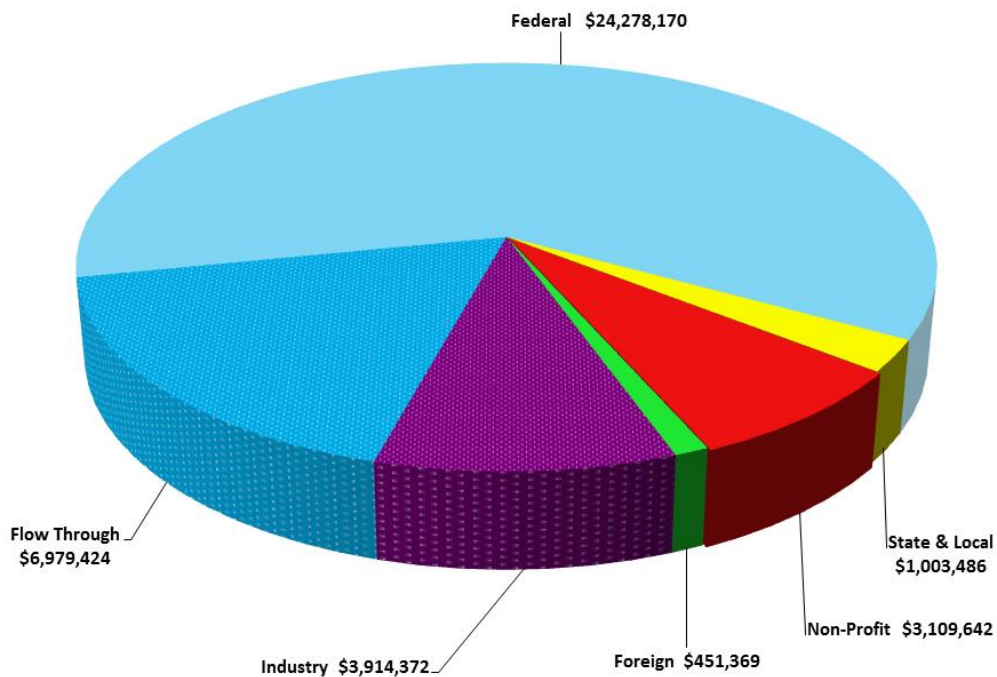
- **FY13: Despite sequestration, Research Expenditures** (e.g., federal awards, state grants such as MLSC, internal support such as seed grants and startup funds) **grew 4% from \$60.6M in FY12 to \$63.1M)**

Federal Funding by Agency FY2013



Industry (incl.  
Flow Through,  
SBIR) comprised  
~ 25% of awards

Funding by Source FY2013



NSF,  
NIH/NIOSH/HRSA,  
and DOD are the  
major sources of  
federal awards